

Form PTO-1449 (modified)

List of Patents and Publications for Applicant's

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

Atty. Docket No.

UVMO:003USC1

Serial No.

10/655,547

Applicant

Robert Michael Roberts *et al.*

Filing Date:

September 4, 2003

Group:

Unknown

U.S. Patent Documents

See Page 1

Foreign Patent Documents

See Page 1

Other Art

See Page 1

U.S. Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Name | Class | Sub Class | Filing Date of App. |
|-------------|-----------|-----------------|----------|------------------------|-------|-----------|---------------------|
| | A1 | 2001/0024799 | 09/27/01 | Jordan <i>et al.</i> | 435 | 7.9 | 01/17/01 |
| | A2 | 4,271,140 | 07/02/81 | Bunting | 436 | 500 | 08/01/78 |
| | A3 | 4,895,804 | 01/23/90 | Bostwick <i>et al.</i> | 435 | 240.27 | 08/24/87 |

Foreign Patent Documents

| Exam. Init. | Ref. Des. | Document Number | Date | Country | Class | Sub Class | Translation Yes/No |
|-------------|-----------|-----------------|----------|---------|-------|-----------|--------------------|
| | B1 | 99/06038 | 02/19/99 | PCT | | | |

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|-------------|-----------|--|
| | C1 | Atkinson <i>et al.</i> , "Characterization of placental-specific binucleate cell glycoproteins possessing a novel carbohydrate," <i>J. Biol. Chem.</i> , 268(35):26679-26685, 1993. |
| | C2 | Birch and Loh, "Homology cloning of aspartic proteases from an endocrine cell line using the polymerase chain reaction," <i>Biochem. Biophys. Res. Commun.</i> , 177(3):920-926, 1993. |
| | C3 | Cameron and Malmo, "Evaluation of an ultrasonic doppler probe for pregnancy diagnosis in cattle," <i>Austr. Vet. J.</i> , 70:109-111, 1993. |
| | C4 | Davies, "The structure and function of the aspartic proteinases," <i>Ann. Rev. Biophys. Chem.</i> , 19:189-215, 1990. |
| | C5 | Garabayo <i>et al.</i> , "Caprine pregnancy-associated glycoproteins (PAG): Their cloning expression and evolutionary relationship to other PAG," <i>Mo. Reprod Dev.</i> , 57:311-322, 2000. |
| | C6 | Gerrie <i>et al.</i> , "Pregnancy-associated alpha-2 glycoprotein: development of a sensitive enzyme-linked immunoassay and comparison of serum concentrations in adults and children," <i>Clinical Chimica. Acta</i> , 155:51-60, 1986. |
| | C7 | Green <i>et al.</i> , "Bovine pregnancy-associated glycoproteins (PAG) exhibit distinct expression patterns during gestation," <i>Biol Reprod</i> , 60(Suppl 1):497, 1999. |

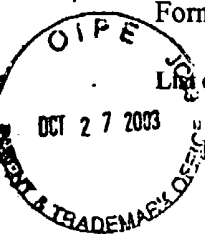
25347703.1

EXAMINER:

DATE CONSIDERED:

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)



| | | | |
|---|--|---|--------------------------|
| Form PTO-1449 (modified) | | Atty. Docket No. UVMO:003USC1 | Serial No. 10/655,547 |
| List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | Applicant Robert Michael Roberts <i>et al.</i> | |
| | | Filing Date: September 4, 2003 | Group: Unknown |
| U.S. Patent Documents See Page 1 | Foreign Patent Documents See Page 1 | Other Art See Page 1 | |

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|----------------|--------------|--|
| Ja | C8 | Green <i>et al.</i> , "Identification of a family of Kunitz domain proteins expressed in bovine and ovine trophoblast," <i>Biol Reprod</i> , 58 (Suppl 1):310. |
| | C9 | Green <i>et al.</i> , "Identification of a new aspartic proteinase expressed by the outer chorionic cell layer of the equine placenta," <i>Biol. Reprod.</i> , 60:1069-1077, 1999. |
| | C10 | Green <i>et al.</i> , "Pregnancy-associated bovine and ovine glycoproteins exhibit spatially and temporally distinct expression patterns during pregnancy," <i>Biol. of Repro.</i> , 62:1624-1631, 2000. |
| | C11 | Green <i>et al.</i> , "Pregnancy-associated glycoproteins of the horse," <i>Biol Reprod</i> , 50 (Suppl 1):152, 1994. |
| | C12 | Green <i>et al.</i> , "Pregnancy-associated glycoproteins: A family of catalytically inactive aspartic proteinases," <i>Mol Biol Cell</i> , 6 (Suppl 1):454, 1995. |
| | C13 | Green <i>et al.</i> , "The establishment for an ELISA for the detection of pregnancy-associated glycoproteins (PAGs) in the serum of pregnant cows and heifers," Departments of Animal Sciences and Biochemistry, University of Missouri-Columbia. |
| | C14 | Guillomot, "Cellular interactions during implantation in domestic ruminants," <i>J. Reprod. Fertil.</i> , 49(Suppl.):39-51, 1995. |
| | C15 | Guruprasad <i>et al.</i> , "Comparative modeling and analysis of amino acid substitutions suggests that the family of pregnancy-associated glycoproteins includes both active and inactive aspartic proteinases," <i>Protein Engin.</i> , 9:849-856, 1996. |
| | C16 | Haig, "Genetic conflicts in human pregnancy," <i>Rev. Biol.</i> , 68:495-532, 1993. |
| | C17 | Hughes <i>et al.</i> , "Adaptive diversification within a large family of recently duplicated, placentally expressed genes," <i>Proc. Natl. Acad. Sci., USA</i> , 97:3319-3323, 2000. |
| | C18 | Inoue <i>et al.</i> , "Aspergillus niger var. Macrosporus proteinase B. cDNA cloning, expression, and activation of the proteinases, <i>Aspartic Proteinases</i> , 581-587, 1995. |
| | C19 | Ishiwata <i>et al.</i> , "Characterization of gene expression profiles in early bovine pregnancy using a custom cDNA microarray," <i>Mol Reprod Dev.</i> , 65(1):9-18, 2003. |
| | C20 | King <i>et al.</i> , "Development of the bovine placenta from days 20 to 29 of gestation," <i>J. Reprod. Fert.</i> , 59:95-100, 1980. |

25347703.1

| | |
|---|----------------------------------|
| EXAMINER: <i>C/HW J. Chen</i> | DATE CONSIDERED: <i>11/24/04</i> |
| EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT. | |

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

| | | | |
|---|--|---|--------------------------|
| Form PTO-1449 (modified) | | Atty. Docket No. UVMO:003USC1 | Serial No. 10/655,547 |
| List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | Applicant Robert Michael Roberts <i>et al.</i> | |
| | | Filing Date: September 4, 2003 | Group: Unknown |
| U.S. Patent Documents See Page 1 | Foreign Patent Documents See Page 1 | Other Art See Page 1 | |

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|-------------|-----------|--|
| <i>jr</i> | C21 | Kiracofe <i>et al.</i> , "Pregnancy-specific protein B in serum of postpartum beef cows," <i>J. Anim. Sci.</i> , 71:2199-2205, 1993. |
| | C22 | Li <i>et al.</i> , "Mutational analysis of the vesicular stomatitis virus glycoprotein G for membrane fusion domains," <i>J. Virol.</i> , 67(7):4070-4077, 1993/ |
| | C23 | Mialon <i>et al.</i> , "Detection of pregnancy by radioimmunoassay of a pregnancy serum protein (PSP60) in cattle," <i>Reprod. Nutr. Dev.</i> , 34:65-72, 1994. |
| | C24 | Mialon <i>et al.</i> , "Peripheral concentrations of a 60-kDa pregnancy serum protein during gestation and after calving and in relationship to embryonic mortality in cattle," <i>Reprod. Nutr. Dev.</i> , 33:269-282, 1993. |
| | C25 | Patel <i>et al.</i> , "Effect of fetal mass, number, and stage of gestation on pregnancy-specific protein B concentrations in the bovine," <i>Theriogenol.</i> , 44:827-833, 1995. |
| | C26 | Patel <i>et al.</i> , "Plasma bovine pregnancy-associated glycoprotein concentrations throughout gestation in relationship to fetal number in the cow," <i>Eur. J. Endoc.</i> , 137:423-428, 1997. |
| | C27 | Roberts <i>et al.</i> , "Glycoproteins of the aspartyl proteinase gene family secreted by the developing placenta," <i>Aspartic Prot., Struct., Funct., Biol., Biom., Impl.</i> , 231-240, 1995. |
| | C28 | Roberts <i>et al.</i> , "Maternal Recognition of pregnancy," <i>Biol. Reprod.</i> , 54:294-302, 1996. |
| | C29 | Roberts <i>et al.</i> , "New and atypical families of type I interferons in mammals: comparative functions, structures, and evolutionary relationships," <i>Prog. Nucl. Acid Res. Mol. Biol.</i> , 56:287-326, 1997. |
| | C30 | Sasser <i>et al.</i> , "Characterizations of pregnancy-specific protein B in cattle," <i>J. Reprod. Fertil.</i> , 37(suppl.):109-113, 1989. |
| | C31 | Sasser <i>et al.</i> , "Detection of pregnancy by radioimmunoassay of a novel pregnancy-specific protein in serum of cows and a profile of serum concentrations during gestation," <i>Biol. Reprod.</i> , 35:936-942, 1986. |
| | C32 | Scott <i>et al.</i> , "Serum levels of pregnancy-associated alpha2-glycoprotein during pregnancy in autoimmune thyroid disease: relationship to disease activity," <i>Clinical and Experimental Immunology</i> , 59:564-570, 1985. |
| <i>✓</i> | C33 | Szafranska <i>et al.</i> , "Porcine pregnancy-associated glycoproteins: new members of the aspartic proteinase gene family expressed in trophoblast, <i>Biol. Reprod.</i> , 53:21-28, 1995. |

25347703.1

EXAMINER:

C. H. J. C. H.

DATE CONSIDERED:

1/24/04

EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)

| | | | |
|---|--|---|--------------------------|
| Form PTO-1449 (modified) | | Atty. Docket No. UVMO:003USC1 | Serial No. 10/655,547 |
| List of Patents and Publications for Applicant's INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | Applicant Robert Michael Roberts <i>et al.</i> | |
| | | Filing Date: September 4, 2003 | Group: Unknown |
| U.S. Patent Documents See Page 1 | Foreign Patent Documents See Page 1 | Other Art See Page 1 | |

Other Art (Including Author, Title, Date Pertinent Pages, Etc.)

| Exam. Init. | Ref. Des. | Citation |
|-------------|-----------|---|
| | C34 | Szafranska <i>et al.</i> , "The genes for porcine and bovine pregnancy-associated glycoprotein 2: Its structural organization and analysis of its promoter," <i>Mol. Reprod. Dev.</i> , 66:137-146, 2001. |
| | C35 | Szenci <i>et al.</i> , "Evaluation of false ultrasonographic diagnoses in cows by measuring plasma levels of bovine pregnancy-associated glycoprotein 1," <i>Vet. Record</i> , 304-306, 1998. |
| | C36 | Wedemayer, "Structural insights into the evolution of an antibody combining site," <i>Science</i> , 276(5319):1665-1669, 1997. |
| | C37 | Wooding, "Current topic: the syneptitheliochorial placenta of ruminants: binucleate cell fusions and hormone production," <i>Placenta</i> , 13:101-113, 1992. |
| | C38 | Xie <i>et al.</i> , "A novel glycoprotein of the aspartic proteinase gen family expressed in bovine placental trophoctoderm," <i>Biol. Reprod.</i> , 51:1145-1153, 1994. |
| | C39 | Xie <i>et al.</i> , "Identification of the major pregnancy-specific antigens of cattle and sheep as inactive members of the aspartic proteinase family," <i>Proc. Natl. Acad. Sci., USA</i> , 88:10247-10251, 1991. |
| | C40 | Xie <i>et al.</i> , "Multiple pregnancy-associated glycoproteins are secreted by day 100 ovine placental tissue," <i>Biol. Reprod.</i> , 57:1384-1393, 1997. |
| | C41 | Xie <i>et al.</i> , "The diversity and evolutionary relationships of the pregnancy-associated glycoproteins, an aspartic proteinase subfamily consisting of many trophoblast-expressed genes," <i>Proc. Natl. Acad. Sci., USA</i> , 94:12809-12816, 1997. |
| | C42 | Xie <i>et al.</i> , "The gene encoding bovine pregnancy-associated glycoprotein-1, an inactive member of the aspartic proteinase family," <i>Gene</i> , 159:193-197, 1995. |
| | C43 | Xie <i>et al.</i> , "Trophoblast-specific processing and phosphorylation of pregnancy-associated glycoprotein-1 in day 15 to 25 sheep placenta," <i>Biol. Reprod.</i> , 54:122-129, 1996. |
| | C44 | Zoli <i>et al.</i> , "Light and electron microscopic immunolocalization of bovine pregnancy-associated glycoprotein in the bovine placenta," <i>Biol. Reprod.</i> , 46:623-629, 1992. |
| | C45 | Zoli <i>et al.</i> , "Purification and characterization of a bovine pregnancy-associated glycoprotein," <i>Biol. Reprod.</i> , 45:1-10, 1991. |
| | C46 | Zoli <i>et al.</i> , "Radioimmunoassay of a bovine pregnancy-associated glycoprotein in serum: its application for pregnancy diagnosis," <i>Biol. Reprod.</i> , 46:83-92, 1992. |

25347703.1

| | |
|---|------------------|
| EXAMINER: | DATE CONSIDERED: |
| EXAMINER: INITIAL IF REFERENCE CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT. | |

INFORMATION DISCLOSURE STATEMENT — PTO-1449 (MODIFIED)